Advances in Environmental Biology 2014 vol.8 N13, pages 191-196

Observations of platanthera bifolia (L.) Rich. (Orchidaceae) Subpopulation spatial structure dynamics

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Abstract

© 2014 AENSI Publisher All rights reserved. The spatial structure of Platanthera bifolia (L.) Rich. subpopulations is studied under different environmental conditions. The cartographic material is analyzed on the basis of studying the Ripley K-function (Ripley, 1976, 1977) behavior study, as well as using the pair correlation function (Wiegand, Moloney, 2004) and the method of «moving window» on the basis of kernel function (Silverman, 1986; Scott, 1992). It is found out that full value subpopulations of P.bifolia have the aggregate discrete-continuum type of spatial structure, and the random distribution of species is the indicator of the subpopulation degradation. The seed reproduction of P.bifolia is at the base of an important mechanism for the species subpopulation stability - “the movement” of a subpopulation from unfavorable microsites to more optimal ones.

Keywords

Microsite, Platanthera bifolia (L.) Rich, Population dynamics, Spatial and ontogenetic structure, Subpopulation